



**Environmental
Protection
Agency**

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Environmental Permit

Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

Reference No.:	20211124_GHCCM
Fees Paid:	Medium (C1) i.e., US \$ 500 Per Year
Fees Paid:	US\$ 2500 for Five (5) Years (July, 2022-June, 2027)
Addressee:	Gerard H. Cunje Managing Director Gerard General Construction Lot 114, Mon Repos East Coast Demerara
Activity:	Operation of a Concrete Products Manufacturing Plant Supported by a Mechanical Workshop, Storage of Industrial Chemicals (Chemical Additives) and Fuel.

Gerard General Construction hereinafter referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to Operate a Concrete Products Manufacturing Plant Supported by a Mechanical Workshop, Storage of Industrial Chemicals (Chemical Additives) and Fuel at Lot 10 and the West ¼ of Lot 11, Two Brothers Canal #1 Polder, West Bank Demerara hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted on November 24, 2021 and subject to the terms and conditions set forth herein under the Environmental Protection Act, existing and/or forthcoming Regulations made under the said Act, and/or any applicable guidelines, best practices and standards relevant to this project.

The Permit Holder, His Servants, Agents and/or Sub-Contractors shall comply with the following Terms and Conditions for Operation:

1.0. GENERAL OPERATION

- 1.1 Make an application to the Agency to vary this Permit in instances where it becomes necessary to:
 - i. Change the construction, operation, structure, or layout of the facility and all associated buildings;
 - ii. Change equipment, machine, apparatus, mechanism, system or technology

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- iii. serving the facility;
Change the position and design of any outlet at the point or points of discharge of effluents; or
 - iv. Effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 Standard Operating Procedures (SOPs) for safe Operation of the Concrete Products Plant and other associated equipment shall be established and maintained.
- 1.2.1 All employees shall be trained on these SOPs outlined in **condition 1.2** above. Training records shall be maintained and submitted to the EPA upon request.
- 1.3 An automated system shall be maintained to support the manual shut off of the Concrete Products Plant in cases of emergencies.
- 1.4 The Processing Plant, trucks, generators and other associated equipment shall at all times be mounted or parked and serviced on impervious bases, to prevent fuel spills and leaks from entering the soil.
- 1.5 Servicing and maintenance of the Concrete Processing Plant, Generator(s), and other equipment shall be conducted in accordance with manufacturer's specification. Summarised maintenance records shall be maintained and made available to the EPA upon request.
- 1.6 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices. Annual training records shall be maintained on site and made available to the EPA upon request.
- 1.7 Fire prevention and control equipment shall be maintained in accordance with the **Guyana Fire Service Approval**.
- 1.8 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws, of Guyana**.
- 1.9 **The Permit Holder is required to submit to the EPA upon receipt, the requisite approvals from the Central Housing and Planning Authority (CH&PA) or any other authority with jurisdiction and oversight over the Project.**
- 2.0 FUEL HANDLING AND STORAGE**
- 2.1 Adopt and comply with the National SOP "Guidance for the Design, Construction, Modification, and Maintenance of Petrol Filling Stations" and any forthcoming code of practice/guidelines pertaining to the operation of fuel storage.

- 2.2 A register of the quantities of fuel and associated hazardous materials stored onsite shall be established and maintained. Registered information shall be maintained on site and made available to the EPA upon request.
- 2.3 Fuel shall at all times be stored above-ground and away from ignition sources. **'No Smoking'** signs shall be posted where fuel is handled or stored.
- 2.4 Secondary containment around the fuel tanks shall be inspected for cracks and deterioration to ensure they are liquid tight to withstand hydrostatic pressure of any contained liquid when full. Inspection report shall be maintained on site and made available to the EPA upon request.
- 2.5 All secondary containment shall remain sealed and all piping shall enter or exit the containment over the wall. Secondary containment shall provide total containment, and no part of the tank infrastructure (e.g. dispenser, filling hoses and valves) shall protrude outside the containment.
- 2.6 Discharge from the secondary containment of the fuel tank is **Strictly Prohibited**.
- 2.7 Fuel storage tanks shall be visually inspected to verify their integrity. Inspection reports shall be maintained on site and made available to the EPA upon request.
- 2.8 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 2.9 Maintenance and/ or repair of fittings, pipes and hoses shall be in accordance with manufacturer's specifications. A summarised inspection report shall be kept and submitted to the EPA upon request.
- 2.10 Overfill protection shall be installed and maintained on all fuel tanks. This may include an automatic shut off device or an audible or visible overfill alarm.
- 3.0 STORAGE OF INDUSTRIAL CHEMICALS (Chemical Additives)**
- 3.1 A register of the quantities of Chemicals stored at the Project shall be established and maintained. Registered information shall be maintained on site and made available to the EPA upon request.
- 3.2 Chemical Storage Areas shall be clearly labeled with **"Danger, Chemical Storage Area- Authorized Personnel Only"** where applicable as a spill control measure.
- 3.3 Flammable materials shall be stored away from ignition sources. **'No Smoking'** signs shall be posted where these materials are handled and stored.
- 3.4 Secondary containment (bund area) shall be maintained around storage areas of all liquid chemicals. The secondary containment shall have:

- i. A volume equivalent to the volume of liquid stored within the largest storage container and;
 - ii. Walls constructed of impermeable materials.
- 3.5 Chemicals shall be stored in accordance with the manufacturer's directions or Safety Data Sheet (SDS) instructions.
 - 3.5.1 SDS shall be readily available and easily accessible at all times at the Project.
- 3.6 Chemicals shall be segregated and stored in accordance with their hazard characteristics compatibility e.g., toxic, flammable, corrosive, acid, etc.
- 3.7 Chemical containers shall be clearly labelled in accordance with the Globally Harmonized System of Classification and Labelling. The following must be evident:
 - i. Signal Word;
 - ii. GHS Symbols- (Hazard Pictograms);
 - iii. Manufacturer Information;
 - iv. Precautionary Statements/ First Aid;
 - v. Hazard Statements; and
 - vi. Product Name or Identifiers.
- 3.8 Liquid Chemicals stored within drums shall:
 - a) Be placed within banded storage to ensure any leaks or spills are immediately contained;
 - b) Be clearly marked with their contents, and any appropriate warning symbols;
 - c) Be regularly inspected to detect rust, leaks or other damage.
- 3.9 Chemical storage containers shall be inspected for signs of leakage or corrosion and damaged containers must be replaced immediately. Inspection reports must be maintained and signed by the appropriately qualified inspecting officer and his/her supervisor.
- 3.10 Chemicals shall not be stored on damaged or inadequately secured racking or on damaged pallets to minimize the risk of spills.
- 3.11 Employees involved in the management of chemicals shall be trained on Hazardous Material Communication and Emergency Preparedness Response. Training reports shall be maintained on site and made available to the EPA upon request.
- 4.0 OPERATION OF WORKSHOP**
- 4.1 Servicing and maintenance of vehicles and equipment shall be conducted within the confines of the workshop and on an impervious base.

- 4.2 Contaminated wastewater from cleaning of greasy hands and equipment shall be collected and/or routed through the oil-water separator prior to discharge into the environment.
- 4.3 A drip pan shall be utilised to capture waste oil spills during servicing and maintenance activities.
- 4.4 Engine oil, grease, lubricants and other chemicals used at the Project shall be stored in accordance with the Safety Data Sheets (SDS). SDS shall be readily available and easily accessible.
- 4.5 Flammable materials shall be stored away from ignition sources. 'No Smoking' signs shall be posted where such materials are handled and stored.
- 4.6 Oil- contaminated waste from servicing and maintenance activities such as rags, filters, etc. shall be collected, treated and disposed by an EPA Authorised Hazardous Waste Disposal Facility.

5.0 AIR QUALITY

- 5.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000**.
- 5.2 Best Available Technologies (BATs) shall be implemented to prevent the overfilling of silo and bulk containers holding dusty materials beyond capacity.
- 5.3 Driveways and passageways within the Project shall be maintained with an impervious material such as crusher run, asphalt road to reduce dust emissions.
- 5.4 Monitor ambient air quality at the boundary of the property to assess compliance with the requisite standards below:

Air Pollutant	Averaging Time	Maximum Permissible Level	Type of Monitoring
PM _{2.5}	24h	25 µg/m ³	Ambient
PM ₁₀	24h	50µg	Ambient

Monitoring shall be conducted during normal operations by trained personnel utilising calibrated equipment. An air quality monitoring plan shall be submitted to the EPA for approval by **December 31, 2022**.

Monitoring of the parameters above shall be conducted in accordance to the approved monitoring plan and the results shall be submitted to the Agency upon request.

- 5.5 Particulate matter and dust suppression methods shall be maintained around the stock piles and plant which includes but not limited:
- 5.5.1 Wet suppression/watering shall be implemented to control dust emissions from material stockpiles, and other components of the operation that contributes to dust emissions in accordance with a schedule;
 - 5.5.2 Dust screens/fences shall be erected to control particulate matter/dust emissions;
 - 5.5.3 Stockpiles of sand and other dusty materials shall be located in an area of low winds as far as possible from nearby residents;
 - 5.5.4 Storage of sand and stone and other aggregates on the roadway and government reserves is strictly prohibited;
 - 5.5.5 Stockpiles shall be relatively flat on top, and not exceed a height of eight (8) feet;
 - 5.5.6 Material shall be removed from the stockpile on the leeward side.
 - 5.5.7 All stockpiles of sand and other dusty materials shall be covered with tarpaulin or other suitable material, when not in use for extended periods, to prevent particles from becoming airborne.
 - 5.5.8 The Concrete Products Plant shall be established within an enclosed facility/building to prevent particles from becoming airborne.
- 5.6 Temporary stockpiles of aggregates shall be stored in a secured, designated area, and protected from wind and water erosion.
- 5.6.1 Materials shall not be placed within 3m of any drain, providing the installment of a silt fence adequately designed and constructed to retain the stockpile.
 - 5.6.2 Stockpiles shall not exceed two (2) meters in height.
 - 5.6.3 Temporary stockpiles shall not exceed twenty-four (24) hours before being removed, or transferred to the appropriate designated stockpile areas established by Condition 5.5.
- 5.7 Raw materials such as sand and gravel shall be covered during transport to the Facility to reduce air borne emissions.

6.0 NOISE MANAGEMENT

- 6.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 6.2 Noise emissions shall be monitored at the Project's boundary to determine compliance with **Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions** into the Environment, not exceeding the **Commercial Limits** listed below:

Commercial Limits: **80 dB** (Day-time (06:00 h-18:00 h))
 65 dB (Night-time (18:00 h- 06:00 h))

A noise quality monitoring plan shall be submitted to the EPA for approval by **December 31, 2022.**

Noise monitoring shall be conducted in accordance to the approved plan and the results shall be submitted to the Agency upon request.

- 6.3 All machines/equipment shall be serviced in accordance to the manufacturer's specification to ensure efficiency and reduce the level of noise produced. A summarised maintenance report shall be maintained on-site and made available to the EPA upon request.
- 6.4 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.
- 6.5 All significant noise-producing equipment, such as generators, shall be equipped with appropriate silencers or mufflers and/or are enclosed in suitable acoustic enclosures where necessary, to reduce noise levels impacting the surrounding environment to achieve compliance with Guyana National Bureau of Standards (GNBS) requirement.

7.0 WATER QUALITY

- 7.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 7.2 Discharge of untreated effluent from the Project into the surrounding environment is **strictly prohibited.**
- 7.3 An oil-water separator shall be installed at the point of final discharge from the Project (specifically Fuel Storage and Workshop).
- i. GPS coordinates for the final discharge point/s from the oil-water separator shall be submitted to the EPA by **December 31, 2022.**
- 7.4 All wastewater from the secondary containment of the fuel tank and workshop shall be directed to the Oil-water Separator for treatment.

7.5 All wastewater (concrete washout) shall be directed to a washout bund for collection and treatment.

7.5.1 Discharge of sediments into waterways is **strictly prohibited**.

7.5.2 Dried sediments shall be collected and reused in the batching process if applicable.

7.6 Discharges from the Project into the environment should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following are the allowable limits for the general environment and should not be exceeded:

Parameter	Maximum Concentration	Units
pH	5.0-9.0	
Temperature	<40	°C
Biological Oxygen Demand (BOD)	<50	mg/L
Chemical Oxygen Demand (COD)	<250	mg/L
Total Suspended Solid (TSS)	<50	mg/L
Oil and Grease	<10	mg/L

A water quality monitoring plan including but not limited to sampling point/s displayed on a map and frequency of sampling shall be submitted to the EPA for approval by **December 31, 2022**.

Monitoring of the parameters above shall be conducted at the approved sampling point/s and the results analysed at a GNBS certified laboratory or trained personnel using calibrated equipment. Analyses shall be submitted to the Agency as part of the Annual Report.

7.7 Fuel/lubricants including waste oils shall not be drained from equipment onto the ground or into waterways.

8.0 WASTE MANAGEMENT

8.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulations, 2013**, promote good sanitation and solid waste disposal practices on site. Covered garbage receptacles shall be placed upon impervious base at strategic locations, both within and outside facility.

8.2 Burning solid waste is **strictly prohibited**. All solid waste shall be disposed by an EPA Authorised Waste Disposal Company.

8.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility's drains and surroundings shall be kept free of vegetation and litter.

8.4 Waste collection areas shall be kept clean. Dry methods shall be used when cleaning around waste handling and disposal areas (e.g. sweeping, use of absorbents).

9.0 HAZARDOUS WASTE (Waste Oil, Oily Rags, Etc.) MANAGEMENT

9.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulation 2000**.

9.2 Hazardous waste shall be stored in containers appropriate for the waste stream.
That is:

Sealed Metal Containers

- i. Solvents and Petroleum- based products;
- ii. Waste ink, Press-wash, Oil and Oily Absorbents

9.3 Hazardous waste containers shall be labelled with the following:

- i. The words "**Hazardous Waste**"
- ii. The type of waste
- iii. Beginning accumulation date

9.4 Waste oil containers shall be labelled with the following:

- i. The words "**Waste Oil or 'Used oil'**"
- ii. Beginning accumulation date

9.5 Hazardous waste shall be stored in a covered, bunded area. This area shall include the following:

- i. Signage- "Hazardous Waste Storage Area"
- ii. Low traffic
- iii. No floor drains
- iv. Bunded area shall provide 110% containment of the largest volume stored therein.

9.6 Hazardous waste shall be treated and/ or disposed by an EPA authorised Hazardous Waste Disposal Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which must be submitted to the EPA as a component of the **Annual Report**.

10.0 COMPLIANCE MONITORING AND REPORTING

10.1 Notify the Environmental Protection Agency within **one (1) hour** of the discovery of the occurrence of environmental emergencies (e.g., oil spills, hazardous materials/wastes spill, sudden onset disaster, natural technological or human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood). Notification as prescribed by Section 19(3)(a) of the Environmental Protection Act, shall be submitted to the EPA within **twenty-four (24) hours** of the discovery of the incident occurring.

- 10.1 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 10.2 Notify the Agency in writing of any change of name or ownership of the Permit Holder's facility within **thirty (30) days** after the change occurs.
- 10.3 Notify the Agency within **twenty-one (21) days** in event of death, bankruptcy, liquidation or receivership of the Permit Holder or if the Company becomes party to an amalgamation.
- 10.4 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e., any solid, liquid, gas, odor, sound, vibration, radiation, heat or combination of any of them).
- 10.5 Submit Annual Reports to the EPA on your compliance with this Environmental Permit on or before **March 31, each year**.
- 10.6 Report to the Agency any non-compliance(s) with the Environmental Permit:
 - i. Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorisation for Operation becomes aware of the non-compliance outlining the anticipated manner in which human health or the environment may be impacted.
 - ii. Within **seventy-two (72) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance, submit to the Agency a written report containing a description of the non-compliance, its cause, the period of non-compliance including exact dates and time and the anticipated time it is expected to continue if the non-compliance(s) has not been corrected.
- 10.7 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 10.8 It is the responsibility of the Permit Holder to ensure the permitted activity and premises are secured and that all practicable steps necessary to prevent fires, explosions, leaks or suspected leaks and spills at the permitted premises are taken.

11.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

- 11.1 The EPA reserves the right to conduct regular inspections of the Permit Holder's operation as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.
- 11.2 The Permit Holder shall be liable for any serious environmental harm caused by polluting the environment, pursuant to s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 11.3 The Permit Holder shall be liable for any activity that causes or is likely to cause pollution of the environment unless all reasonable and practicable measures are taken to prevent or minimize any resulting adverse effect, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.4 The Permit Holder shall be liable for discharging, causing or permitting the entry into the environment, of any contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 11.3 and 11.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.6 The Permit Holder shall not be indemnified by the Agency for any activity that causes or is likely to cause pollution to the environment, resulting from adverse effects through the discharge, any contaminant in any amount, concentration, ultra hazardous substances, chemicals or otherwise, and shall be rendered liable to prosecution and to penalties prescribed under the Environmental Protection Act and Regulations.
- 11.7 The Permit Holder shall be liable of any gross negligence or willful misconduct caused by the Permit Holder, his Servants and/or Agents, to the environment, biodiversity, protected species and natural habitat with respect to any release, discharge, or spill, of contaminant fluids, oil or lubricants.
- 11.8 Should the Permit Holder contravene or be likely to contravene any condition of this Permit, the Agency may serve on him an Enforcement Notice in accordance with Section 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.9 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose a serious threat to natural resources or the environment, or a risk of serious pollution of the environment or any damage to public health, the EPA may issue to the Permit Holder a Prohibition Notice, which may order him to immediately cease the offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.10 The EPA reserves the right to conduct regular inspections of the Permit Holder's activities as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap 20:05, and the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 11.11 The Permit Holder, His Servants and/or Agents shall at all times, allow entry to the permitted facility to any Officer designated by the EPA for the purposes of conducting inspections or any other legitimate business of the Agency. Pursuant to Section 38 of

the Environmental Protection Act, Cap. 20:05, Laws of Guyana, it is an offence to assault, obstruct or hinder an authorised person in the execution of his/her duty under the said Act or its Regulations and the Permit Holder shall be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.

- 11.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 11.13 **This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 11.14 This Environmental Permit is effective for the period stipulated herein; **July, 2022 to June, 2027.**
- 11.15 This Environmental Permit shall remain valid until **June 30, 2027** unless otherwise suspended, cancelled, modified or varied, in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.
- 11.16 This Permit must be renewed by submitting a completed *Application Form for Renewal of Environmental Authorization* to the Agency at least six months before this Permit expires, that is, no later than **December 31, 2026.**
- 11.17 Any late submission of renewal application after the specified date as stated above, the Agency may require the Permit Holder to pay, in addition to the renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (GY\$2000.00) per day for every business day late**, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 11.18 Failure to comply with the requirements of this Permit or with applicable laws and regulations, whether existing or forthcoming, shall render the Permit Holder liable to prosecution and to penalties, inclusive of civil penalties, injunctive relief and imprisonment, as prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection Regulations and other applicable Laws of Guyana.

Signed by *Shamifah Lazali* on behalf of the Environmental Protection Agency.


Kemraj Parsram
Kemraj Parsram
Executive Director

Date

2022.07.14

Environmental Permit- Ref. 20211124_GHCCM
Issued under the Environmental Protection Act, Cap. 20:05, Environmental Protection
(Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

I hereby accept the above terms and conditions upon which this Environmental Permit (Renewal) is granted and agree to abide by the Environmental Protection Act, 1996, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000, and any forthcoming regulations and standards made under this Act.

NAME:	Gerard Gunje
DESIGNATION:	Managing Director
SIGNATURE:	
DATE:	2022-07-18

